Bruhat Bangalore Mahanagara Palike
Excecutive Engineer Yelahanka Zone Project Division

Name of Work: Drilling of borewells erection of pumpset, laying of pipeline and construction of water tank (GLR) in Ward no.05

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
1	**Earthwork excavation by manual means for foundations**, either in pits or trenches 1.5m and above in width, in soil not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches , stacking the excavated soil clear from edges from edges of excavation with lead upto 50m, including breaking of clods complete as per specification in hard soil .As per the Directions of the Engineer in Charge								
	Sump portion	1	15.40	10.70	5.85	963.96			
	Main Line	1	295.10	0.90	0.90	239.03			
	Distribution Line	1	44.40	0.60	0.60	15.98			
	RCC DRAIN								
	Shivapura								
	2nd B Cross Rd	1	92.30	1.10	1.00	101.53			
	2nd Cross Rd(From Dead End)	1	84.00	1.10	1.05	97.02			
	2nd A Cross Rd	2	47.00	1.10	1.00	103.40			
	Maruthi Nilaya House Rd	1	32.00	1.10	1.00	35.20			
	Debris	7	7.00	5.40	0.40	104.52			
	RCC Culvert	2	6.75	1.40	1.00	18.90			
						1679.55	**Cum**		
				Upto 125%		**1493.15**	**Cum**	**339.00**	506179.02
				Above 125%		**186.39**	**Cum**	**339.00**	63,186.74
	Approved Rate	339.00							
2	KSRB 2.8 : **Providing and Filling in foundation with granite / trap broken metal 100mm.** and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. As per the Directions of the Engineer in Charge								
		1	15.10	10.40	0.60	94.22			
						94.22	**Cum**	2754.00	259492.90
	Approved Rate	2754.00							
3	KSRB 2.6 : **Providing and filling sand in foundation** to required depth for sub soil treatment including watering ramming with all lead and lift complete as per specifications. As per the Directions of the Engineer								
		1	15.10	10.40	0.30	47.11			
						47.11	**Cum**	2336.00	110053.63
	Approved Rate	2336.00							
4	**Providing and injecting chemical emulsion** for Pre- constructional Anti-Termite Treatment creating continuous chemical barrier under and around the column pits, walls, trenches, basement excavation, top surface of the plinth filling, junction of wall and floor, along the external perimeter of building, expansion joints, over the top surface of consolidated earth on which apron is to be laid, Surrounding of pipes and conduits, with chloropyriphos emulsifiable concentrates of 20% concentration at 3.19 Litre/sqm., including cost of chemical, diluting in water to one percent concentration, labour, HOM complete as per specifications. (Plinth area of the building at ground floor only shall be measured) Specification As per the								
		1	15.10	10.40		157.04			
						157.04	**Sqm**	120.00	18,844.80
	Approved Rate	120.00							
5	Providing and laying in position **plain cement concrete of mix 1:4:8** with OPC @ 180 kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85 cum and fine aggregates @ 0.57 cum machine mixed, machine mixed, concrete laid in layers not exceeding 15cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications. SpecificationAs per the								

BBMP, Bangalore-92

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Tank PCC	1	14.50	9.80	0.45	63.95			
	RCC DRAIN								
	Shivapaura								
	2nd B Cross Rd	1	92.30	1.10	0.15	15.23			
	2nd Cross Rd(From Dead End)	1	84.00	1.10	0.15	13.86			
	2nd A Cross Rd	2	47.00	1.10	0.15	15.51			
	Maruthi Nilaya House Rd	1	32.00	1.10	0.15	5.28			
	RCC Culvert	2	6.75	1.40	0.15	2.84			
						116.66	**Cum**		
				Upto 125%		**81.04**	**Cum**	**5785.00**	**468829.05**
				Above 125%		**35.62**	**Cum**	**5785.00**	**206046.15**
	Approved Rate	5785.00							
6	KSRB 4.2.2 : Providing and laying in **position reinforced cement concrete of Design Mix M20** with OPC @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to IS 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM curing, complete but excluding cost of reinforcement as per specifications. Specification As per the								
	Bottom Slab	1	14.80	8.90	0.60	79.03			
	Side Wall	2	13.90	0.30	3.40	28.36			
		3	8.00	0.30	3.40	24.48			
	Roof Beam								
		2	13.90	0.30	0.30	2.50			
		1	13.90	0.45	0.30	1.88			
		3	8.00	0.30	0.30	2.16			
		2	8.00	0.45	0.30	2.16			
	Top Slab								
		1	13.90	8.00	0.30	33.36			
	Haunching Concrete								
		4	8.00	(0.5*0.75*0.75)		9.00			
		2	13.90	(0.5*0.6*0.6)		7.82			
	Deduct Openings								
		-2	0.90	0.90	0.30	-0.49			
	Main Line	1	295.10	0.90	0.20	53.12			
	Distribution Line	1	44.40	0.60	0.20	5.33			
	RCC DRAIN Raft								
	Shivapaura								
	2nd B Cross Rd	1	92.30	0.90	0.15	12.46			
	2nd Cross Rd(From Dead End)	1	84.00	0.90	0.15	11.34			
	2nd A Cross Rd	2	47.00	0.90	0.15	12.69			
	Maruthi Nilaya House Rd	1	32.00	0.90	0.15	4.32			
	RCC Culvert	2	6.75	1.20	0.20	3.24			
	RCC DRAIN Wall								
	Shivapaura								
	2nd B Cross Rd	2	92.30	0.15	0.72	19.80			
	2nd Cross Rd(From Dead End)	2	84.00	0.15	0.79	19.82			
	2nd A Cross Rd	4	47.00	0.15	0.60	16.92			
	Maruthi Nilaya House Rd	2	32.00	0.15	0.60	5.76			
	RCC Culvert	4	6.75	0.20	0.60	3.24			

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
						358.30	Cum	6417.00	2299188.13
	Approved Rate	6417.00							
7	KSRB 4.2.8: Providing and laying in **position reinforced cement concrete of design Mix M20** with OPC @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregates @ 0.46cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in ground floor level for roof slabs, staircase, lintels, and beams retaining walls, return walls, walls (any thickness) including attached pilasters, columns,pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM curing, complete but								
	Operating Room/Store Room								
	Plinth Beam	2	3.40	0.30	0.15	0.31			
		2	2.25	0.30	0.15	0.20			
	Lintel Beam								
	Door	1	1.20	0.15	0.15	0.03			
	Window	1	1.50	0.15	0.15	0.03			
	Roof Beam	2	3.40	0.30	0.15	0.31			
		2	2.25	0.30	0.15	0.20			
	Roof Slab	1	3.40	3.00	0.15	1.53			
						2.61	**Cum**	**6681.00**	**17,422.38**
	Approved Rate	6681.00							
8	KSRB 4-6.1: Providing and **removing centering, shuttering, strutting**, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour								
	Bottom Slab								
		4	15.20		0.50	30.40			
	Side Wall								
		10	23.60		1.85	437.19			
						467.59	**Sqm**	**293.00**	**137003.87**
	Approved Rate	293.00							
9	KSRB 4-6.5 : Providing and **removing centering, shuttering, strutting, propping** etc., and removal of form work for columns, pillars, post and struts, square / rectangular/ polygon in plan including cost of all materials, labour complete as per specifications As per the Directions of the Engineer in Charge								
	Columns	13	1.80		4.50	105.30			
						105.30	**Sqm**	**517.00**	**54,440.10**
	Approved Rate	517.00							
10	KSRB 4-6.8 : Providing and **removing centering, shuttering, strutting, propping etc.**, and removal of form work for sides and soffits of beams, beams haunchings, cantilever, girders, bressumers and lintels exceeding 1m in depth including cost of all materials, labour complete as per specifications.As per the Directions of the								
	Sump Roof Beam								
	Sides	16	10.21		0.60	98.04			
	Machine room								
	Plinth beam sides	8	2.77		0.15	3.39			
	Roof beam sides	8	2.77		0.30	6.78			
						108.21	**Sqm**	**331.00**	**35,816.40**
	Approved Rate	331.00							
11	KSRB 4-6.3 : Providing and **removing centering, shuttering, strutting, propping etc.**, and removal of form work for flat surface such as suspended floors, roofs, landings, balconies and likes, thickness above 200 mm including cost of all materials, labour complete as per Specification.As per the Directions of the Engineer in								
	Top Slab								
		1	13.90	8.00		111.20			

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Operating Room/Store Room								
	Roof Slab	1	3.40	2.85		9.69			
						120.89	Sqm	499.00	60,324.11
	Approved Rate	499.00							
12	KSRB 5-14 : Providing and constructing **precast concrete solid blocks** with compressive strength not less than 3.5 Newton per sqm with cement mortar 1:4 masonry (quoin, Jamb, closer blocks) with solid concrete blocks of size 40x15x20cms conforming to I.S: 2185/1965 in superstructure including cost of materials, labour charges, scaffolding, curing complete as per specifications.As per the Directions of the Engineer in								
	Long Wall	2	3.40		3.00	20.40			
	Short Wall	2	2.25		3.00	13.50			
	Parapet Wall								
	Long Wall	2	3.40		0.30	2.04			
	Short Wall	2	3.00		0.30	1.80			
	Deduction								
	Door	-1	0.90		2.10	-1.89			
	Window	-1	1.20		1.20	-1.44			
						34.41	Sqm	1081.00	37,197.21
	Approved Rate	1081.00							
13	KSRB 4.9.2 : Providing **T.M.T steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.								
	For Operating Room 100kg/cum		246.55	0.10		25.08			
	For Drain 60kg/cum		103.11	0.06		6.19			
	For Culvert 90kg/cum		6.48	0.09		0.58			
						31.85	**Tn**	**80468.00**	**2562616.16**
	Approved Rate	80468.00							
14	KSRB 2.3 : **Filling available excavated earth** (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. In depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. Including cost of all labour complete as per specifications.As per the Directions of the								
	Sump Excavation area	1	15.40	10.70	5.90	972.20			
	Deduction								
	Tank foundation filling - Boulders	1	15.10	10.40	0.60	-94.22			
	Tank foundation filling - Sand	1	15.10	10.40	0.30	-47.11			
	Tank PCC	1	14.50	9.80	0.45	-63.95			
	Tank bottom Slab	1	14.80	8.90	0.60	-79.03			
	Side wall	1	13.90	8.00	3.40	-378.08			
						309.81	Cum		
				Upto 125%		109.13	Cum	228.00	24880.50
				Above 125%		200.68	Cum	228.00	45755.95
	Approved Rate	228.00							
15	**Providing 18mm thick cement plaster** in single coat with cement mortar to brick masonry incluing rounding off corners wherever required smooth rendering, Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. As per the Directions of the Engineer in Charge								
	Operating Room/Store Room								
	Outside walls	2	3.70		3.15	23.31			
		2	2.55		3.15	16.07			
	Inside walls								

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
		2	3.40		3.15	21.42			
		2	2.25		3.15	14.18			
	Tank Outside								
	Long wall	2	13.90		1.00	27.80			
	Short Wall	2	8.00		1.00	16.00			
	Parapet Wall								
	Outside								
	Long Wall	2	3.70		0.30	2.22			
	Short Wall	2	2.55		0.30	1.53			
	Inside								
	Long Wall	2	3.50		0.30	2.10			
	Short Wall	2	2.35		0.30	1.41			
	Parapet Wall top								
	Long Wall	2	3.50	0.10		0.70			
	Short Wall	2	2.35	0.10		0.47			
	Deduction								
	Door	-0.5	0.90		2.10	-0.95			
	Window	-0.5	1.20		1.20	-0.72			
						125.54	**Sqm**	**296.00**	**37,158.36**
	Approved Rate	296.00							
16	KSRB 15-3.14: **Providing 12mm thick cement plaster** in single coat with cement mortar 1:4 (with lime rendering) to ceiling inclunding & rounded off corners wherever required smooth rendering Providing & removing scaffolding, including cost of materials, labour curing complete as per specification As per the								
	Operating Room/Store Room								
	Inside roof area	1	3.40	2.25		7.65			
	Tank inside								
	Long wall	2	13.30		3.30	87.78			
	Short wall	4	7.40		3.30	97.68			
						193.11	**Sqm**		
				Upto 125%		**61.25**	**Sqm**	**255.00**	**15618.75**
				Above 125%		**131.86**	**Sqm**	**255.00**	**33624.30**
	Approved Rate	255.00							
17	KSRB 15-16.1 : **Providing and finishing external walls in two coats** with waterproof cement paint of approved brand and shade to give an even shade after thoroughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour,								
	Operating Room/Store Room								
	Outside walls	2	3.70		3.15	23.31			
		2	2.55		3.15	16.07			
	Insdie walls								
		2	3.40		3.15	21.42			
		2	2.25		3.15	14.18			
	Parapet Wall								
	Outside								
	Long Wall	2	3.70		0.30	2.22			
	Short Wall	2	2.55		0.30	1.53			
	Inside								
	Long Wall	2	3.50		0.30	2.10			

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Short Wall	2	2.35		0.30	1.41			
	Parapet Wall top								
	Long Wall	2	3.50	0.10		0.70			
	Short Wall	2	2.35	0.10		0.47			
	Deduction								
	Door	-0.5	0.90		2.10	-0.95			
	Window	-0.5	1.20		1.20	-0.72			
						81.74	**Sqm**	116.00	9,481.26
	Approved Rate	116.00							
18	**Waterproofing of RCC Terrace / podium slab / toilet / utilities / water retaining** structure by preparing the surface by chipping and cleaning and Grouting of Honey comb, voids,cracks / construction joints with cement slurry (1kg cement added in 10 ltr of water) added with 100gm of inorganic accelerator, followed by spraying of liquid biological modified alkaline earth silicates @ 0.40 ltr per sqm on whole surface to reduce the micro porosity and allowing it to dry, curing the surface for the silicates to penetrate deeper into the concrete and spraying waterproofing impregnate liquid containing silane and silanol linear copolymer @ 0.50 ltr per sqm and finally applying polymer slurry made out of cross linked acrylic / styrene / butadiene & cement in the ratio of 1:0.1, @ 0.50kg/sqm on the whole surface, including all labour charges tools and equipments, all complete as per the specification As per the Directions of the Engineer in Charge								
	Operating Room/Store Room								
	Top Slab								
		1	3.40	3.00		10.20			
	GLR Tank								
	Top Slab								
		1	13.90	8.00		111.20			
	Deduction								
		-2	13.90	0.30		-8.34			
		-3	8.00	0.30		-7.20			
		-2	8.00	0.90		-14.40			
	Bottom Slab								
		1	14.80	8.90		131.72			
	Deduction								
		-2	14.80	0.30		-8.88			
		-3	8.90	0.30		-8.01			
	Wall								
		4	8.00		3.60	115.20			
		2	13.90		3.60	100.08			
	Tank Outside walls								
		2	8.00		2.25	36.00			
		2	13.90		2.25	62.55			
						520.12	**Sqm**	596.00	309991.52
	Approved Rate	596.00							
19	KSRB 9.4-3 : **Providing Mathi / Nandi wood frames of doors, windows**, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, HOM of machineries complete as per								
	Door Frame	2	2.10	0.150	0.150	0.09			
		2	0.75	0.150	0.150	0.03			
						0.13	**Cum**	71897.00	9,220.79
	Approved Rate	71897.00							

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
20	KSRB 9.5-3 : **Providing and fixing in position fully panelled Mathi/Nandi wood** shutters for doors, styles and rails of 40mm. thick with bottom and lock rails 180mm wide top rail and styles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, HOM of machineries complete as per specifications. (excluding cost of fixtures) Specification As per the Directions of the Engineer in Charge								
	Door Shutter	1	1.00		2.10	2.10			
	Window shutter	1	0.90		1.20	1.08			
						3.18	**Sqm**	**4735.00**	**15,057.30**
	Approved Rate	4735.00							
21	KSRB 9-27.1 : **Fixing of door frame in an existing opening including embeeding frame** in floor and walls after cutting masonry for holdfasts for embedding holdfast in cement concrete 1:3:6 of 20mm and down size granite metal painting two coats of coal tar to sides of frame, making good the damages to walls and floor as required and disposal of the debries with lead upto 50 m. including cost of materials, labour charges,								
	Operating Room Door Frame	1				1.00			
						1.00	**Nos**	**1549.00**	**1,549.00**
	Approved Rate	1549.00							
22	KSRB 7.9 : Providing and fixing M.S.grill work for windows and ventilators weighing 21kg/sqm using M.S. flats, or M.S. square rods, or combination of M.S. flats and square rods as per approved design, drawing including cutting steel sections and welding the same to required pattern with a coat of red lead primer, cost of materials, fixtures, labour and HOM of machinery complete as per specifications. As per the Directions of								
	Window	1	0.9		1.2	1.08	**Sqm**		
					Conidering 21 kg/Sqm	22.68	**Kgs**		
						22.68	**Kgs**	**108.00**	**2,449.44**
	Approved Rate	108.00							
23	Supplying and wiring adopting **loop system in existing PVC Conduit** /casing capping using copper PVC insulated multi strand2x1.5Sqmm copper wire with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet/ gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. (5/2.1) I. Point wiring using class A Materials a)								
		1	5.00			5.00			
						5.00	**Each**	**183.00**	**915.00**
	Approved Rate	183.00							
24	Supplying and wiring adopting **loop system in existing PVC Conduit** /casing capping using copper PVC insulated multi strand2x1.5Sqmm copper wire with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet/ gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. (5/2.1) I. Point wiring using class A Materials b)								
		1	2.00			2.00			
						2.00	**Each**	**257.00**	**514.00**
	Approved Rate	257.00							
25	Supplying and mounting **2 Nos. of 2 way 6 amps flush type** switches either surface/flush mounted on existing gang box or in 4mm thick plastic sheet and mounted on a flush mounted wooden box and wiring as								
		5				5.00			
						5.00	**Each**	180.00	900.00
	Approved Rate	180.00							
26	Supplying 6A flush type socket and **6 amps flush type SP** switch either flush mounting in a existing in a 4mm thick plastic sheet and fixing over a flush mounted wooden box and wiring using necessary capacity wires as required.(15/3.1) b) 6Amps 3/5 way switch socket.As per the Directions of the Engineer in Charge								
		2				2.00			
						2.00	**Each**	**157.00**	314.00
	Approved Rate	157.00							

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
27	Supplying and fixing miniature **circuit breakers on existing MCB** distribution boards using necessary fixing materials and 'C' Type curve , indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required.(47/6.16) 5-32Amps SPN Group 'A' As per the Directions of the Engineer in								
		1				1.00			
						1.00	**Each**	**439.00**	**439.00**
	Approved Rate	439.00							
28	Supplying of 2'x2' LED recessed liminaire with 36 Watts system wattage. Housing Shall be with pressure die cast aliminum alloy with **corrosion proof resistant polyester power coated.** Drive operates with voltage range from 100V to 270V 50/60Hz with short circuit, overload and mis-wiring protection. Lumen Maintenance of 70% at 70% at 500000 Hrs. injuction moulded poly carbonate diffuser for better mechanical stability, light transmission & avoid pot hole effect. Junction Temperature shall be <70 degree Celsius. Driver is on constant current driver @ 0.06A with PF >0.92 with line voltage @ 220-240V 50/60Hz, driver efficiency > 85% & THD< 15%, LED Efficiency > 130 im/W at 1W & Fixture Efficiency > 75im/w with CRI > 75 with injuction moulded polycarbonate lens with < 80mm depth. 5Years Warrenty against any manufacturing defect working under standerd electrical condition.(26/4.33.2) a)2'x2'-36Watts As per the Directions of the								
		4				4.00			
						4.00	**Each**	**8653.00**	**34,612.00**
	Approved Rate	8653.00							
29	Supplying of LT UG cable **having aluminium conductor PVC insulated,** sheathed, galvanised, steel wire/steel tap armoured cable with PVC outer sheathing 1.1 KV class.(55/7.4) Class `A' PVC Cable 3.5 core 25 sqmm As								
		1	9.70			9.70			
						9.70	**Mtrs**	**690.00**	**6,693.00**
	Approved Rate	690.00							
30	**Digging of trench** of 0.6m deep x 0.50 mtr wide refiling the trench to the required ground level and consolidating etc complete As per the Directions of the Engineer in Charge								
		1	9.70			9.70			
						9.70	**Mtrs**	**82.00**	**795.40**
	Approved Rate	82.00							
31	Geophysical investigation of site for Sinking borewell for supplying drinking water to the habitations either through the hand pump,MWS,P.W.S.S by vertical electrical sounding by adpoting venner or Schlumberger's method,including reconnaissance survey of Geological formation. Geophysical investigation of existing ground indecundity its quality & acceptability of the users indicating the location of site,recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth of 1.0 metre inconsolidated formation for proper seating of casing pipe,depth of drilling required to cover full depth of aquifer proposed to be tapped,probable yield and other information required including transportation of instrument and accesories to work site,engaging technical personal and labour required etc.,(PRED SR 2012 13 It.9.4, P-47) (PRED SR 20-05-2019 It.13.04)								
		1				1.00			
						1.00	**Nos**	**3956.00**	**3,956.00**
	Approved Rate	3956.00							
32	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above 900 CMF & above in all strata including over burden upto 20 M fixing of casing pipes, collars and cap with necessary cutting and threading including transportation of rig and supporting vehicals, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour .(excluding cost of casing pipes, collars, cap ect.) As per the Directions of the Engineer in								
	0.00m to 50.00m	1	50.00			50.00	Nos	364.00	18,200.00
33	50.00m to 100.00m	1	50.00			50.00	Nos	464.00	23,200.00
34	100.00m to 150.00m	1	50.00			50.00	Nos	476.00	23,800.00
35	150.00m to 200.00m	1	50.00			50.00	Nos	563.00	28,150.00

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
36	200.00m to 250.00m	1	50.00			50.00	Nos	666.00	33,300.00
37	250.00m to 300.00m	1	50.00			50.00	Nos	735.00	36,750.00
38	300.00m to 350.00m	1	50.00			48.00	Nos	866.00	41,568.00
39	350.00m to 400.00m	1	50.00			0.00	Nos	945.00	0.00
40	400.00m to 450.00m	1	41.60			0.00	Nos	1185.00	0.00
41	**Providing and fixing 180mm dia PVC Pipe** 10kg/sqcm (casing pipe) (page no.XXXV, SL no.889, 3005) As per the Directions of the Engineer in Charge								
		1	14.00			14.00			
						14.00	**Rmt**	**1614.00**	22,596.00
	Approved Rate	1614.00							
42	**Supply of ISI Mark 175mm nominal Bore**, Plain end steel casing Pipe-grade of steel Fee 4100 of wakk thickness 504mm thick confirming to IS 4270:2001 and latest amendments, electric resistance welded steel electric or basic oxygen process in fandom length of 5 to 7mtr. Both ends threaded confirming to Is554/1985 one end fixed with socket confirming to IS 270:2001 and other end with screwed pipes. All pipes shall be reasonably free from defectes. The tubes shall be resonably straigth should be with ISI Marking Weighting 25.10 kg/mtr (Inclusive of all taxes and durties) Prices include Collar - medium duty.As per the Directions of the Engineer in Charge								
		1	70.00			70.00			
						70.00	**Rmt**		
				Upto 125%		**37.50**	**Cum**	**1391.00**	**52,162.50**
				Above 125%		**32.50**	**Cum**	**1391.00**	**45,207.50**
	Approved Rate	1391.00							
43	**Providing 175mm dia Bore Cap CE** (M) As per the Directions of the Engineer in Charge								
		1				1.00			
						1.00	**Nos**	**105.00**	105.00
	Approved Rate	105.00							
44	Atalanta suguna CRI **KIRLOSKAR and other equipments pumps** 10.00 HP/7.5 KV (20 stage)As per the Directions of the Engineer in Charge								
		1				1.00			
						1.00	**Nos**	**67972.00**	67,972.00
	Approved Rate	67972.00							
45	Providing and fixing in **trenches galvinised/mild steel tube 50mm dia** nominal bore with all fittings (earth work in trenches to be measured and paid for seperately) including cost of all materials, labour charges,HOM of equipment and testing complete as per specifications. As per the Directions of the Engineer in Charge								
		1	250.00			250.00			
						250.00	**Rmt**	**440.00**	110000.00
	Approved Rate	440.00							
46	Supplying and drawing **3 core flat PVC sheathed submersible pump** cable maufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to table 3 class 5 to IS 8130-1984 and virgin grade PVC insulation and power coating extruded PVC sheathed suitable for working voltage								
		1	428.60			428.60			
						428.60	**Rmt**	**147.00**	63,004.20
	Approved Rate	147.00							
47	Providing and fixing in position **50mm Nominal bore non-return valve** vertical type of approved make including cost of all materials,labour and HOM of equipment with all leads complete as per specifications.As per the Directions of the Engineer in Charge								

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
		1				1.00			
						1.00	Nos	1439.00	1,439.00
	Approved Rate	1439.00							
48	Spplying and fixing 50mm GI Union.As per the Directions of the Engineer in Charge								
		1				1.00			
						1.00	Nos	235.00	235.00
	Approved Rate	235.00							
49	Spplying and fixing 50mm GI Elbow.As per the Directions of the Engineer in Charge								
		1				1.00			
						1.00	Nos	117.00	117.00
	Approved Rate	117.00							
50	Spplying and fixing 50mm GI Nipple.As per the Directions of the Engineer in Charge								
		1				1.00			
						1.00	Nos	110.00	110.00
	Approved Rate	110.00							
51	Spplying and fixing 50mm GI Hose colleres As per the Directions of the Engineer in Charge								
		64				64.00			
						64.00	Nos	108.00	6,912.00
	Approved Rate	108.00							
52	Supplying and fixing 20" x 20" x 2.5" polished wood board made of not less than 15mm thick plank on both the sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc., As per the Directions of the Engineer in Charge								
		1				1.00			
						1.00	Nos	307.00	307.00
	Approved Rate	307.00							
53	Supplying and fixing miniature circuit breakers on existing MCB distribution board using necessary fixing materials and 'C' type curve indicator ON/OFF energy cross-3 with short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.As per the Directions of the Engineer in Charge								
		1				1.00			
						1.00	Nos	759.00	759.00
	Approved Rate	759.00							
54	Supplying of TPST with rewirable porcelain channels in SM encloser made out of 14 SWG powder coated point of approved colour 32 amps As per the Directions of the Engineer in Charge								
		1				1.00			
						1.00	Each	1134.00	1,134.00
	Approved Rate	1134.00							
55	Supplying and fixing LED type panel board indicating lamp with required colour suitable for 220 V AC 50 HZ 12/24 V DC as per the Directions of the Engineer in Charge								
		1				1.00			
						1.00	Each	271.00	271.00
	Approved Rate	271.00							
56	Suppling fully automatic star delta starter unit push button type with suitable wires 2 conductors and adjustable thermal timer mounted on a common base plate held in steel enclosure for use on 400/440 volts phase and wired after fixing to the existing wooden board for motor, upto 12.5HP as per the Directions of								
		1				1.00			
						1.00	Nos	6719.00	6,719.00

	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Approved Rate	6719.00							
57	Supplying and fixing single phase preventer using necessary wires over an existing panel board suitable for motar up to 20 HP capacities.As per the Directions of the Engineer in Charge								
		1				1.00			
						1.00	**Nos**	**469.00**	**469.00**
	Approved Rate	469.00							
58	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade multistrand copper conductor single core wire in open or concealed system of wiring as per IS 694:1990 & conforming to the attached GTP of group A. 4 sqmm as per the Directions of the Engineer in Charge								
		1	6.40			6.40			
						6.40	**Mtrs**	**47.00**	**300.80**
	Approved Rate	47.00							
59	Supplying fixing and wiring heavy duty low voltage capacitors conforming to IS 2834 phase 400/440 volts grade, for power factor improvement of rotating machinery as per the Directions of the Engineer in Charge								
		1				1.00			
						1.00	**Each**	**420.00**	**420.00**
	Approved Rate	420.00							
60	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C cotouts and other equipments on the meter board using 40mm dia 2.90 thick GI pipe 2.5 mtr long buried in a pit... The pit should be filled with equal proprotion of salt and charcoal 150mm alround the pipe to complete depth. The connection from the								
		1				1.00			
						1.00	**Nos**	**3149.00**	**3,149.00**
	Approved Rate	3149.00							
61	Digging of trench of 0.6mtrs deepx0.5 mtrs wide refilling the trench to the required gorund level and consolidating etc., complete as per the Directions of the Engineer in Charge								
		1	7.20			7.20			
						7.20	**Mtrs**	**107.00**	**770.40**
	Approved Rate	107.00							
62	Supplying laying 1.1 KV class LT UG cable having aluminium conductor PVC insulated extruded inner shethed galvanised steel strip (excep 2cx 10 sqmm wire armoured) confirming to IS-3975:1990 (No. of strip indicated in GTP) and extruded PVC outer sheathed armoured cable with specified IS-1554,part-1:1988 and confirming								
		1	7.20			7.20			
						7.20	**Mtrs**	**100.00**	**720.00**
	Approved Rate	100.00							
63	Labour charge for laying 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe/ on wall / on poles as required in existing trench/duct. 6 sq mm to 16 sq mm As per the Directions of the Engineer in Charge								
		14				14.00			
						14.00	**Nos**	**12.00**	**168.00**
	Approved Rate	12.00							
64	Supplying and fixing class-A(medium duty) GI pipe wall thickness not less then 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1KV class 40mm As per the Directions of the Engineer in Charge								
		1	1.50			1.50			
						1.50	**Rmt**	**352.00**	**528.00**
	Approved Rate	352.00							

	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
65	Supplying and fixing LT cast iron pot heads suitable for 1.1KV class UG cable filled with necessary bitumen / insulating compound complete with terminals,clamps bolts and nuts and washer etc.,complete for 16 sq mm as per specifications. As per the Directions of the Engineer in Charge								
		1				1.00			
						1.00	**Nos**	**283.00**	283.00
	Approved Rate	283.00							
66	Supplying and fixing porcelain fuse channel with cut out on the existing wooden block and wiring complete 63 amp As per the Directions of the Engineer in Charge								
		3				3.00			
						3.00	**Nos**	**143.00**	429.00
	Approved Rate	143.00							
67	Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with								
	Main Line	1	223.00	0.60	0.60	80.28			
						80.28	**Cum**	**509.00**	40,862.52
	Approved Rate	509.00							
68	KSRB13-9 : Providing and fixing to wall, ceiling and floor high density polyethylene pipes 6.00 kgf/sq.cm working pressure of outside diameter raising mains & exposed distribution pipes with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials,								
		1	0.00			0.00			
						0.00	**Mtrs**	**422.00**	0.00
	Approved Rate	422.00							
69	Making connection of G.I.distribution branch with G.I.main of 25mm to 40mm. Nominal bore, including cutting and threading the pipes,providing and fixing Tee, nuts,labour for all item of works,testing and HOM of equipments complete as per specifications..As per the Directions of the Engineer in Charge								
	Main Line	2				2.00			
						2.00	**Each**	**548.00**	1,096.00
	Approved Rate	548.00							
70	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778 having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings, this includes jointing of pipes and fittings with one step solvent cement, trenching, refilling & testing of joints complete.								
	Distribution Line	1	0.00			0.00			
						0.00	**Mtrs**	**178.00**	0.00
	Approved Rate	178.00							
71	KSRB 2-4 : Refilling available around earth pipe lines,cables in layers mot exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. And lift upto 1.5m. Including cost of all labour complete as per specifications..As per the Directions of the Engineer in Charge								
	Main Line	1	223.00	0.60	0.60	80.28			
	Deduct PCC Qunatity	1				-20.07			
	Deduct Cocnrete Qunatity	1				-20.07			
						40.14	**Cum**	**137.00**	5,499.18
	Approved Rate	137.00							
72	KSRB 4-1.3 : Providing and laying in position plain cement concrete of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in								
	Main Line	1	223.00	0.60	0.15	20.07			
						20.07	**Cum**	**5785.00**	116104.95
	Approved Rate	5785.00							

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
73	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of all								
	Main Line	1	223.00	0.60	0.15	20.07			
						20.07	**Cum**	**6148.00**	**123390.36**
	Approved Rate	6148.00							
74	KSRB 2-4 : Providing and fixing in position brass gate valve with C.I.wheel of approved quality (screwed end) 50mm nominal bore including cost of all materials,labour and HOM of equipments with all leads complete as per specifications..As per the Directions of the Engineer in Charge								
	For Main Line	2				2.00			
						2.00	**Each**	**1972.00**	**3,944.00**
	Approved Rate	1972.00							
75	KSRB13-6.2-1 : Providing and fixing in position brass stop cock of approved quality 15mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications.As per the Directions of the Engineer in Charge								
		1				1.00			
						1.00	**Each**	**160.00**	**160.00**
	Approved Rate	160.00							
76	Submersible Three Phase 6 inch/150mm-20HP/15kW- Stage-30As per the Directions of the Engineer in Charge								
		1				1.00			
						1.00	**Unit**	**101080.00**	**101080.00**
	Approved Rate	101080.00							
77	G.I. Pipe 100 mm dia B classAs per the Directions of the Engineer in Charge								
	Main road Poojamma temple opposite to tank	1	37.50			37.50			
						37.50	**Mtrs**	**980.00**	**36,750.00**
	Approved Rate	980.00							
78	BESCOM deposit Charges and miscellaneous As per the Directions of the Engineer in Charge								
	GLR To OHT	1				1.00			
						1.00	**Nos**	**12599.00**	**12,599.00**
	Approved Rate	12599.00							
E1	Providing and Fixing **pre cast covering Slab 100mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)								
	Data rate	2337.00							
	Above 4.99%	116.62							
	Total	**2453.62**							
	RCC DRAIN Slab								
	Shivapaura								
	2nd B Cross Rd	1	92.30	0.90		83.07			
	2nd Cross Rd(From Dead End)	1	81.00	0.90		72.90			
	2nd A Cross Rd	2	47.00	0.90		84.60			
	Maruthi Nilaya House Rd	1	32.00	0.90		28.80			
	Missing Slab	1	30.00	0.90		27.00			

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Deduct BS Slab	-23	0.60	0.90		-12.42			
						283.95	**Sqm**	**2453.62**	696704.35
E2	Providing and Fixing **pre cast covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.								
	Data rate	5418.00							
	Above 4.99%	270.36							
	Total	**5688.36**							
	Culvert Slab	2	6.75	1.20		16.20			
						16.20	**Sqm**	**5688.36**	92,151.40
E3	Supplying PVC ring tight pipes conformin to IS 4980 :2000 With latest amendments and conveying to work site rolling and lowering into trenches laying true line level and prefect linking at joints testing and commissoning incuding loading and un loading at both destinations and cuts of pipes wherever neccessary including joints of PVC pipes and specificals (excluding cost of pipes)with jointing of approvel type with all labour with all lead and lift incuding encasing the pipe alround to adepth of not less then 15cms with soft gravel or selected earth availble from the excavation etc.., completed and giving necessary hydralic test to the required pressure as per IS (Contractor will make his own arrangement for procuring water for testing)(P. No.133 I No 1.4 BWSSB SR 2018-19) **63mm outer dia, 6kg/sqcm & class 5**								
	Basic Rate	122.00							
	Above 4.99%	6.09							
	Total	**128.09**							
	Main Line	1	223.00			223.00			
						223.00	**Mtrs**	**128.09**	**28,563.58**
								Total Construction Cost	**9240726.95**
								Miscellaneous & Rounding off	**585.05**
								GRAND TOTAL	**9241312.00**

Assistant Engineer,
Ward-5
BBMP Bangalore

Asst. Exec. Engineer,
Ward-5
BBMP Bangalore

Executive Engineer,
Yelahanka Project Division,
BBMP Bangalore

Technical Sanction
Accorded For Rs 9241312/-
Head of A/C P 1875
CER NO : 62 **Dt:** 12.10.2021